ACHIEVING A COMMON INFORMATION SYSTEM

APPENDIX

SAN FRANCISCO DEPARTMENT OF CITY PLANNING · FEBRUARY 1969

ACHIEVING A COMMON INFORMATION SYSTEM

APPENDIX

San Francisco Department of City Planning

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PREFACE

This appendix to the report, Achieving a Common Information System, contains a review of a number of information systems developed for the field of planning, together with a survey of the information requirements and resources of the Department of City Planning and other departments and agencies who are interested in the development of a coordinated and unified information system. The material contained in the appendix will provide useful background for further study and design of an information system.

I. A REVIEW OF INFORMATION SYSTEMS FOR CITY PLANNING

As both the population and the services demanded increase, government agencies are faced with a growing need to collect, retrieve, and report relevant information to support policy decisions. At the same time, the expansion in services makes the job of collecting and collating the necessary facts even more difficult. This is particularly true in the area of city planning, since the planner must draw from the wide range of agencies providing the services in order to obtain all the data he needs. These difficulties are reflected in the widespread growth of interest in and development of urban information systems for planners in recent years. The systems fall into two general categories: (a) systems designed to include all operating city agencies; (b) systems designed primarily for use by city planners.

Urban information systems are commonly concerned with real property data since the demand for many city government services is generated by the condition of or activities on real property. Real property information includes all data describing the characteristics of land and what is on it. The parcel or lot usually forms the basic unit of information collection since it is the level at which much of the information originates and it provides for flexibility in the aggregation of data into jurisdictions. In addition, the general urban information systems contain data on other items of interest from the government payroll to case histories of welfare recipients.

1. General Urban Information Systems

One of the most comprehensive of the generalized information systems is that proposed by Edward Hearle and Raymond Mason of the Rand Corporation. This system focuses on all of the functions performed by state and local

governments. It includes information about three categories of objects: real property, persons, and personal property. The real property information includes all data describing the characteristics of land and what is on it; the items being descriptive of a parcel. The real property file also includes a great deal of information about the people who live and/or work on that parcel. In addition, there is a person file which is concerned with all individuals having contact with government agencies and describes their status with respect to these agencies (i.e., voter registration, licenses, police, welfare, health). The personal property file contains data about all items of property apart from real property, which are subject to taxation and/or registration.

Hearle and Mason's recommendations have been modified by Alexandria, Virginia, in that city's operating information system. The system was designed to meet the city government's need for up-to-date, comprehensive information about its physical and social characteristics. It contains environmental data in two master files: (1) based on parcels; (2) based on each section of street. The modifications reflect those items which are relevant to the particular city and which are capable of being updated.

The LOGIC system of Santa Clara County is also designed to meet all of the information needs of the county government. It is an attempt to avoid duplicate collection of data and to provide each department with direct access to data collected by others. The LOGIC system has ten different subsystems operating independently of each other. Only one, the property subsystem, is actually directed toward planning information needs. It contains information about real property and those data which describe the physical boundaries of of the land and what is on it. The basic unit is again the parcel; data are also indexed by structures on the parcel and by establishments within each structure.

2. Urban Information Systems for Planners

The Pittsburgh Planning Department originally ventured into electronic data processing with the aim of consolidating internal office records and providing a means for updating them. It was decided during the process of assembling, standardizing, and recording these data that the mechanization of only internal records was insufficient for planning purposes. Their present system seems to include most city departments. The Pittsburgh system contains, in addition to a real property file, a commercial file, a biostatistical file, a social file, an earned-income file, a school census tape, a park and recreational inventory, a complaint file, a capital improvement program model, and a public property inventory. This organization of information by subject rather than by source allows for more efficient pooling of data collected by different departments.

The Metropolitan Data Center project designed their information system with planners in mind and utilizes data from many agencies. They found it difficult to maintain the flow of data if they were supplied only for the use of planners; as a result, the system was expanded so that it helps contributing agencies in their own operations. It focuses on real property information and is organized into records about each parcel. The Metropolitan Data Center project is unique in that it involves simultaneous systems development for five different cities. The data items adopted by each city vary according to what is applicable and available.

The systems adopted by Prince George and Montgomery counties in Maryland was also designed specifically for use by city planners. It is directed toward the provision of information to aid in the establishment of planning goals, and in the creation and implementation of plans. Land use information constitutes

only one class of the total collected. It will be used to create sample populations for the collection of data on family and employment characteristics.

The Spokane, Washington, data system was designed primarily to provide data for the city's Community Renewal Project. The idea for the system evolved out of the project's plan for mapping census, police, fire, land use, and zoning data from department sources. The requirements grew from this to include establishment and employment data, parcel records, and environmental data. The data bank now has seven decks consisting of: parcel and improvement data, census data, generalized land use and zoning data, and environmental data. Only one parcel and improvement data are collected and stored on a parcel basis.

The Detroit system was initiated to provide a factual basis for the revision of the zoning ordinance and will provide the basis for an annual revision of the land use inventory. Data were originally collected from a survey done on a parcel basis .

3. Common Data Items

In examining these systems and others, consideration has been confined to those segments which have direct use for planning purposes (what is generally included in the land use file). These files are usually organized into several sections.

a. Parcel location. The most frequent locational items are those pertaining to the parcel number and address. Many systems also provide the grid coordinates of the parcel and the number of the block in which it is located. The usual procedure is to also locate the parcel according to the political jurisdiction encompassing it. This includes such items as municipality and school district. Appropriate planning and statistical areas are also frequently included. Virtually all of the systems indicate

the census tract and block numbers. Many others indicate the community, the planning area, and the Master Plan category. Area designations vary considerably depending upon the type of district distinctions set up within each city.

b. Size and topography. The parcel is almost always described in terms of its area in square feet and frequently in terms of its average depth and width. Topographical descriptions, such as the degree of slope or type of soil, are included only in a few systems, since they are not important factors in all cities.

c. Tax and economic factors. The systems commonly include data on the assessed land value, the value of improvements, and the tax exempt status of the land. Many systems also include the owner's name and address and the most recent sale price of the land.

d. Other parcel characteristics. As would be expected in what essentially are land use information systems, the use to which the land is put is described at least in general terms. Mention is usually made of the number of off-street parking spaces and the numbers of other parcels comprising a common site. The actual zoning of the parcel is also included.

e. Building data. All of the items thus far mentioned pertain to the parcel itself. Once the parcel is located and described, data are usually provided which refer to the structures on it. The year and type of construction is frequently indicated as is the present condition of the building. The building is also described in terms of its floor area and the number of floors. In residential buildings, the number of dwelling units is given. Nonresidential buildings often are subject to more detailed

description. Establishments in the building are named and located and vacancies are noted. The number of employees is frequently given and the appropriate Standard Industrial Classification code assigned.

f. Social data. There are several different ways of handling social data in these information systems. Hearle and Mason recommend integration of such data into the parcel file so that for each parcel the names of the occupants and their characteristics are identified. This has the advantage of allowing the grouping of people across any geographic area desired. However, it has the disadvantage of being extremely difficult to collect and maintain. A system which is more easily maintained is to coordinate the records of all persons having contact with local government agencies. For example, in the "People/General" file of the Santa Clara County LOGIC system, and the person file of the Hearle and Mason system, all persons having contact with county agencies are listed by name and the files of each agency are consolidated. This eliminates the need to maintain duplicate identifying data. This system includes such information as voter registration in addition to the more usual health, welfare, and crime items. Detroit and Dade County (Florida), in their social data banks, are concerned primarily with social problem data. Since these files include addresses, the data presumably can be tabulated into any group of geographic areas. The file is easily maintained since the information is all generated by operating city agencies who need only to route their reports through the data processing unit.

Social data actually maintained by local government constitite only part of those items in which city planners are interested. Although these agencies are frequently able to provide a considerable amount of background information (age, sex, occupation, income, etc.), the people

they are reporting on tend not to be representative of the entire population. Some cities, such as Pittsburgh and Spokane, rely on the decennial census for information on the characteristics of their total populations. Other areas, such as Prince George and Montgomery Counties in Maryland, update census data by use of sample surveys. Data gathered in a sample survey usually cannot be used to describe segments of the city or county, but they are useful in ascertaining what population changes are occurring and what the population characteristics of the total area are.

4. Updating Files

All of these systems involve the coordination of several government agencies. The Planning Department is usually in the position of being able to update from its own records only those items pertaining to zoning. The local assessor's office, being the one which actually has to examine property, is the one which provides most, or all (depending upon the city) of the updating information (i.e., assessed value, building condition). Land use data are sometimes provided by the assessors, sometimes by building inspectors, and sometimes by periodic surveys. Each city or county has to determine its own methods of maintaining current data depending upon the resources of government agencies in the area. A great deal of the variation in data items included in the information systems seems to be the result of differences in the ability to updating data.

CITY PLANNING INFORMATION SYSTEMS -- DATA ITEMS

Key to symbols:
x = data item used
x^1= not all participants in the Metropolitan Data Center Project use the data item listed
x^2= voter registration items

PARCEL LOCATIONS	Alexandria, Va.	El Paso, Texas	Hearle & Mason	Los Angeles, Calif.	Metropolitan Data Center	Pittsburgh, Pa.	Prince Edward County, Md.	Santa Clara County, Calif.	Spokane, Wash.	Washington, D.C.
Parcel or lot no.	x	x	x	x	x	x	x	x	x	x
Parcel address	x	x	x	x	x	x		x	x	x
Grid coordinates, latitude			x	x	x^1			x	x	
Grid coordinates, longitude			x	x	x^1			x	x	
Block no.		x	x			x	x	x	x	
Parcel nos. of adjacent parcels										
Nos. of streets or alleys adjacent to parcel			x	x						
Abutting streets 1, 2, and 3	x			x						
Street direction									x	
City square										x
Assessor's code for range land									x	
Fronting street	x			x	x^1					
Block coordinates				x						
Block face coordinates				x						

City Planning Information Systems - continued

	Alexandria, Va.	El Paso, Texas	Hearle & Mason	Los Angeles, Calif.	Metropolitan Data Center	Pittsburgh, Pa.	Prince Edward County, Md.	Santa Clara County, Calif.	Spokane, Wash.	Washington, D.C.
POLITICAL JURISDICTION										
Municipality			x		x[1]			x	x	
County			x							
Township			x		x[1]					
Borough			x							
Judicial district			x					x		
Voting precinct			x	x				x		
Electoral district			x					x		
Ward						x	x			
PLANNING AND STATISTICAL AREA										
Census block no.	x	x	x	x	x[1]	x		x	x	
Census enumeration district no.	x		x	x		x		x		
Census tract no.	x	x	x	x	x[1]	x		x	x	x
Community	x		x	x	x[1]			x		
Community Renewal Project area					x[1]					

PLANNING AND STATISTICAL AREA (continued)	Alexandria, Va.	El Paso, Texas	Hearle & Mason	Los Angeles, Calif.	Metropolitan Data Center	Pittsburgh, Pa.	Prince Edward County, Md.	Santa Clara County, Calif.	Spokane, Wash.	Washington, D.C.
Renewal project no.	x				x[1]					
Industrial district				x	x[1]			x		
Subdivision		x					x	x		
Special district			x					x		
Assessment district			x							
Tax code area			x	x						
Economic area			x							
Marketing area			x							
Hydraulic area			x							
Business district	x									
Historic district	x									
Land use map no.										
Public agency maps			x	x						
Origin-destination zone					x			x		

City Planning Information Systems - continued

PLANNING AND STATISTICAL AREA (continued	Alexandria, Va.	El Paso, Texas	Hearle & Mason	Los Angeles, Calif.	Metropolitan Data Center	Pittsburgh, Pa.	Prince Edward County, Md.	Santa Clara County, Calif.	Spokane, Wash.	Washington, D.C.
Sectors and rings						x				
Planning area and unit	x			x	x			x		
Data block no.						x		x		
Departmental administrative district			x							
Fire zone (inspection and response)	x	x	x	x						
Traffic zone			x					x		
Master Plan category	x		x		x					
Shopping center and/or district					x[1]			x		
Jurisdiction									x	
Flag									x	
Section									x	
Police service district		x		x	x				x	
Rubbish collection district				x						
Sales control area (State Bd.of Equalization)				x				x		

PLANNING AND STATISTICAL AREA (continued)	Alexandria, Va.	El Paso, Texas	Hearle & Mason	Los Angeles, Calif.	Metropolitan Data Center	Pittsburgh, Pa.	Prince Edward County, Md.	Santa Clara County, Calif.	Spokane, Wash.	Washington, D.C.
School district			x	x	x [1]			x		
School attendance area			x							
Postal zone			x							
SIZE OF PARCEL AND TOPOGRAPHY										
Average depth	x	x	x		x			x	x	
Average width	x		x		x			x		
Area in square feet	x	x	x	x	x	x	x	x		x
Frontage	x	x		x	x [1]			x	x	
Frontage on abutting streets 1, 2, and 3	x			x						
Year of subdivision					x [1]			x		
Legal description	x		x	x						
Lot position (i.e., corner, in a key,) (reverse alignment)			x	x						
Degree of slope		x	x	x		x		x		
Direction of slope		x	x					x		

SIZE OF PARCEL AND TOPOGRAPHY (continued)	Alexandria, Va.	El Paso, Texas	Hearle & Mason	Los Angeles, Calif.	Metropolitan Data Center	Pittsburgh, Pa.	Prince Edward County, Md.	Santa Clara County, Calif.	Spokane, Wash.	Washington, D.C.
Elevation			x					x		
Drainage characteristics			x					x		
Soil type			x					x		
Productivity data			x					x		
Extractive data			x					x	x	
Fish and wildlife data			x							
TAX AND ECONOMIC FACTORS										
Assessed land value	x	x	x	x	x	x	x	x	x	x
Improvements value	x	x	x	x	x		x	x	x	x
Total value	x		x		x		x	x		
Tax exempt status	x	x	x		x	x	x	x		x
Dollar amount of exemptions					x[1]			x		
Type of tax emption (i.e., Federal, State, etc.)					x[1]	x		x		
Tax delinquency	x		x	x				x		

TAX AND ECONOMIC FACTORS (continued)	Alexandria, Va.	El Paso, Texas	Hearle & Mason	Los Angeles, Calif.	Metropolitan Data Center	Pittsburgh, Pa.	Prince Edward County, Md.	Santa Clara County, Calif.	Spokane, Wash.	Washington, D.C.
Liens, assessments, and encumbrances			x	x				x		
Deed restrictions			x	x				x		
Easements			x	x				x		
Water or mineral rights			x					x		
Public property code	x									
Business personal property value			x					x		
Date of last sale	x		x	x	x[1]			x		
Most recent sale price	x		x		x[1]	x				
No. of sales since 1955 and price of each						x				
Owner's name	x		x	x		x	x	x		
Owner's address	x		x	x		x		x		
Year of Appraisal		x						x		
Reference to ownership transaction document				x				x		
Previous owner's name				x				x		

City Planning Information Systems - continued

TAX AND ECONOMIC FACTORS (continued)	Alexandria, Va.	El Paso, Texas	Hearle & Mason	Los Angeles, Calif.	Metropolitan Data Center	Pittsburgh, Pa.	Prince Edward County, Md.	Santa Clara County, Calif.	Spokane, Wash.	Washington, D.C.
Previous owner's address				x						
Reference to previous ownership transaction document				x						
Date of previous ownership change				x						
Taxable personl property			x							
Rental price			x							
OTHER PARCEL CHARACTERISTICS										
Change data					x					
Landmark	x				x[1]					
Neighborhood characteristics (developing, stationary, declining, blight)			x		x[1]					
Presence of Nuisances (i.e., noise, vibrations)			x		x[1]					
Proximity to special facilities			x	x	x[1]					
Site characteristics					x					
Street area					x[1]					
Street classification					x[1]					

OTHER PARCEL CHARACTERISTICS (continued)	Alexandria, Va.	El Paso, Texas	Hearle & Mason	Los Angeles, Calif.	Metropolitan Data Center	Pittsburgh, Pa.	Prince Edward County, Md.	Santa Clara County, Calif.	Spokane, Wash.	Washington, D.C.
Utilities			x	x	x [1]				x	
Year of data of new water meter connection					x [1]					
Date parcel established				x	x [1]					
Transit route				x						
Transit segment identity				x						
Presence of sidewalks and curbs		x								
Automobiles registered by no.			x							
Police information			x							
Fires (kind, date, loss)			x							
Alarm responses (kind, date)			x							
Inspection record (date, violations, hazards)			x							
Rooms certified for maximum occupancy			x							
Presence of sprinklers and extinguishers	x		x							
Rescue/ambulance responses			x							

	Alexandria, Va.	El Paso, Texas	Hearle & Mason	Los Angeles, Calif.	Metropolitan Data Center	Pittsburgh, Pa.	Prince Edward County, Md.	Santa Clara County, Calif.	Spokane, Wash.	Washington, D. C.
OTHER PARCEL CHARACTERISTICS (continued)										
Distance to nearest hydrant and alarm box			x							
Health hazard condition			x							
Diseases reported			x							
Inspection record			x							
Health center and district			x	x						
PARCEL USE DATA										
No. of parcels comprising common site	x		x		x			x	x	
Land Use Code (general)	x	x	x	x	x	x	x	x	x	x
Customer off-street parking spaces	x		x	x	x					
Employee off-street parking spaces			x	x	x					
Garage attached or detached	x							x		
Off-street loading facilities	x									
Portion of parcel covered by buildings			x	x	x [1]			x		
No. of buildings on lot	x	x	x	x				x	x	

	Alexandria, Va.	El Paso, Texas	Hearle & Mason	Los Angeles, Calif.	Metrolipan Data Center	Pittsburgh, Pa.	Prince Edward County, Md.	Santa Clara County, Calif.	Spokane, Wash.	Washington, D.C.
PARCEL USE DATA (continued)										
Proposed land use				x	x[1]					
Subsurface structures and improvements			x					x		
Presence of swimming pool	x		x	x				x		
ZONING DATA										
Current zoning	x	x	x	x	x	x	x	x		x
Current zoning area					x[1]			x		
Previous zoning					x[1]			x		
Zone change request no.					x[1]			x		
Zone variance case no.			x		x[1]			x		
Exceptions			x		x[1]					
Special use permit			x					x		
Conditional use permit			x					x		
Nonconforming use		x	x	x						
Date current zoning established				x						

City Planning Information Systems - continued

	Alexandria, Va.	El Paso, Texas	Hearle & Mason	Los Angeles, Calif.	Metropolitan Data Center	Pittsburgh, Pa.	Prince Edward County, Md.	Santa Clara County, Calif.	Spokane, Wash.	Washington, D.C.
ZONING DATA (continued)										
Secondary, tertiary, and quaternary zoning				x						
Proposed zoning				x						
GENERAL BUILDING DATA										
Building no.				x						
Year of building permit					x[1]			x		
Year built	x		x		x			x	x	
Building location code					x			x		
Building setback			x		x[1]					
Frontage of building	x		x							
Building condition	x	x	x	x	x		x	x	x	x
Estimated cost of rehabilitation					x[1]					
Height of building			x					x		
No. of rooms in building	x	x	x		x[1]				x	
No. of elevators	x				x					

City Planning Information Systems - continued

GENERAL BUILDING DATA (continued)	Alexandria, Va.	El Paso, Texas	Hearle & Mason	Los Angeles, Calif.	Metropolitan Data Center	Pittsburgh, Pa.	Prince Edward County, Md.	Santa Clara County, Calif.	Spokane, Wash.	Washington, D.C.
Cost of building construction		x	x					x		
Type of construction	x		x	x	x			x		x
Presence of plumbing					x			x		
Waste disposal facilities	x		x					x		
Presence, capacity, & supplies of civil defense facility			x	x						
Depth of building	x							x		
Exterior wall material	x							x		
Roofing material	x							x		
Heating system and fuel	x							x		
Quality of structure's material								x	x	
Building line, feet				x						
Date of occupancy of building				x				x		

City Planning Information Systems - continued

BUILDING FLOOR DATA	Alexandria, Va.	El Paso, Texas	Hearle & Mason	Los Angeles, Calif.	Metropolitan Data Center	Pittsburgh, Pa.	Prince Edward County, Md.	Santa Clara County, Calif.	Spokane, Wash.	Washington, D.C.
Area of first floor	x	x			x			x	x	
Additional floor area								x	x	
Gross floor area	x	x	x	x	x[1]			x		
Net floor area					x[1]			x		
No. of floors	x	x	x	x	x			x	x	
No. of dwelling units	x	x	x	x	x	x	x	x		
No. of rooms for rent as sleeping rooms					x[1]			x		
Presence of basements	x		x		x[1]			x		
Single-multiple use							x	x		
Occupancy group			x	x				x		

City Planning Information Systems - continued

RESIDENTIAL OCCUPANT CHARACTERISTICS	Alexandria, Va.	El Paso, Texas	Hearle & Mason	Los Angeles, Calif.	Metropolitan Data Center	Pittsburgh, Pa.	Prince Edward County, Md.	Santa Clara County, Calif.	Spokane, Wash.	Washington, D.C.
No. of occupants			x		x[1]			x		
No. of households			x					x		
No. of occupants per room			x					x		
Race			x					x[2]		
Sex			x					x[2]		
Education			x					x[2]		
Family income			x		x[1]			x		
Voter registration			x					x		
Occupations			x					x[2]		
Major industrial groups			x							
Employment status			x					x		
Place of work			x							
Means of transportation to work			x							

City Planning Information Systems - continued

RESIDENTIAL OCCUPANT CHARACTERISTICS (continued)	Alexandria, Va.	El Paso, Texas	Hearle & Mason	Los Angeles, Calif.	Metropolitan Data Center	Pittsburgh, Pa.	Prince Edward County, Md.	Santa Clara County, Calif.	Spokane, Wash.	Washington, D.C.
Tenure of household head			x							
Previous address(es)			x							
Renters or owners			x					x		
Welfare recipient? and type			x					x		
Criminal or correction records			x					x		
Children in school (public, parochial, private)	x		x							
No. of persons in adult education	x									
No. of high school dropouts	x									
No. of pre-school children	x									
ID nos. of school children	x									
Birth and death data			x					x		
Vacant units			x							
Names of occupants			x							

City Planning Information System - continued

NONRESIDENTIAL SPACE USE DATA	Alexandria, Va.	El Paso, Texas	Hearle & Mason	Los Angeles, Calif.	Metropolitan Data Center	Pittsburgh, Pa.	Prince Edward County, Md.	Santa Clara County, Calif.	Spokane, Wash	Washington, D.C.
Attributable parcel acreage					x[1]					
No. of establishments	x				x[1]			x		
Presence of special establishments (air pollutants, X-rays, etc.)			x							
Vacant establishments	x		x		x			x		
Establishment location code				x	x[1]			x		
Floor level of establishment				x	x[1]					
Net floor space used by establishment					x					
Space use code					x					
Establishment name			x	x	x[1]			x		
No. of employees	x		x		x			x	x	
Peak-shift no. of employees					x[1]			x		
Employees' place of residence			x							
Means of transportation to work			x							

NONRESIDENTIAL SPACE USE DATA (continued)	Alexandria, Va.	El Paso, Texas	Hearle & Mason	Los Angeles, Calif	Metropolitan Data Center	Pittsburgh, Pa.	Prince Edward County, Md.	Santa Clara County, Calif.	Spokane, Wash.	Washington, D.C.
Labor force data			x							
S.I.C. land use code	x	x	x					x	x	
Manufacturing use code									x	
Wholesaling use code									x	
Retailing use code									x	
Service use code								x	x	
No. and kinds of licenses and permits on parcel			x					x		
Home office address				x						

II. INFORMATIONAL ITEMS REQUESTED BY THE SAN FRANCISCO DEPARTMENT OF CITY PLANNING

The following list of items was developed on the basis of a survey of the informational requirements of the various divisions of the Department of City Planning. It should be emphasized that the items requested in this list may, on more intensive investigation, be diminished or augmented. However, they serve as a basis for estimating the scope of information needs which must be done as a part of the basic design of such a system. Following the list of items is a glossary defining them.

TABLE 1

REAL PROPERTY DATA ITEMS REQUIRED BY THE DEPARTMENT OF CITY PLANNING

	Division Requiring the Data							
	Capital Improvements	Community Analysis & Research	FACE	Graphics	Planning Studies	Transportation	Urban Design	Zoning
Locational Items								
1. Lot Number*		x	x	x	x	x		x
2. Block number*		x	x	x	x	x		x
3. Lot street address*		x	x		x			x
4. Grid coordinates		x	x		x		x	x
5. Lot numbers of adjacent lots*								x
6. Political & administrative jurisdictions							x	
a. special garment & height districts*					x		x	x
b. school, police, & fire districts		x	x		x			
c. renewal project area*		x			x		x	x
d. FACE area*		x	x		x		x	x
e. census tract*		x	x		x	x	x	
f. census enumeration district*		x				x	x	
g. census block*		x	x		x	x		
7. Lot position (corner, interior)*							x	x
Land Characteristics								
8. Lot size								
a. depth*					x	x	x	x
b. width*					x	x	x	x
c. areas*		x	x		x	x	x	x
d. frontage*					x		x	x

Table 1 continued

	Division Requiring the Data							
	Capital Improve-ments	Community Analysis & Research	FACE	Graphics	Planning Studies	Trans-portation	Urban Design	Zoning
9. Topography								
a. degree of slope					x	x	x	x
b. elevation					x	x	x	x
c. presence and year of fill					x		x	
10. Year of subdivision*								x
11. Year of lot split*								x
12. Zoning								
a. current zoning*			x		x	x	x	x
b. rezoning applications*								x
c. previous zoning*								x
d. zoning stipulations*								x
e. zone variance*			x		x			x
f. automatic conditional use status*			x				x	x
g. conditional use applications*			x		x			x
h. transitional status*								x
i. nonconforming use status and expiration date*			x					x
j. violations*			x					x
13. General land use code		x	x	x	x	x	x	x
14. Off-street parking and loading spaces					x	x	x	x
15. Lot nos. of other lots comprising common site					x			x

[illegible]				x			[illegible]
[illegible]							
[illegible]				x	x	[illegible]	x
[illegible]	x	x	x	x	x	x	x
[illegible]		x					x
[illegible]							x
[illegible]							x
[illegible]							x
[illegible]		x		x			x
[illegible]		x				x	x
[illegible]		x		x			x
[illegible]							x
[illegible]							x
[illegible]							x
[illegible]		x		x	x	[illegible]	x
[illegible]							x
[illegible]							x
[illegible]				x		x	
[illegible]				x	x	x	x
[illegible]				x	x	x	x
[illegible]							

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]						

[illegible]

Table 1 continued

	Division Requiring the Data							
	Capital Improvements	Community Analysis & Research	FACE	Graphics	Planning Studies	Transportation	Urban Design	Zoning
16. Assessed value								
a. land, year assessed		x	x		x			x
b. improvements, year assessed		x	x		x			x
c. total assessed value		x	x		x			x
d. taxes		x			x			x
e. tax exempt status		x			x			x
17. Date of last sale		x	x		x			x
18. Price of last sale		x	x		x			x
19. Owner's name			x		x			x
20. Owner's address			x		x			x
Building Characteristics								
21. Number of buildings on lot		x	x		x	x	x	x
22. Year built		x	x		x		x	x
23. Type of construction		x	x		x		x	x
24. Cost of construction		x					x	
25. Area of first floor					x	x	x	x
26. Gross floor area		x	x		x	x	x	x
27. Number of floors		x			x	x	x	x
28. Height of building							x	x

Table 1 continued

	Division Requiring the Data							
	Capital Improve-ments	Community Analysis & Research	FACE	Graphics	Planning Studies	Trans-portation	Urban Design	Zoning
29. Number of dwelling units (or rooms if a rooming house)		x	x		x	x	x	x
0. Number of bedrooms		x					x	
31. Building condition		x	x		x	x	x	x
32. Conversion permits		x			x			x
33. Demolitions		x			x			x
34. Public Works condemnations								x
35. Health condemnations								x
36. Police permits								x
37. Health permits								x
38. Fire Department permits								x
39. City Planning permits *								x

Table 1 continued

	Division Requiring the Data							
	Capital Improve-ments	Community Analysis & Research	FACE	Graphics	Planning Studies	Trans-portation	Urban Design	Zoning
Nonresidential Space Use								
40. Establishment name			x		x			x
41. Establishment location		x	x		x	x		x
42. SIC land use classification		x	x	x	x	x		x
43. Zoning classification where this use first permitted								x
44. Number of employees		x			x	x	x	

* Available from Department of City Planning records

TABLE 2

SOCIAL INFORMATION ITEMS REQUIRED BY THE DEPARTMENT OF CITY PLANNING

	Division Requiring the Data							
	Capital Improvements	Community Analysis & Research	FACE	Graphics	Planning Studies	Transportation	Urban Design	Zoning
By Census Tract								
Number of persons		x	x		x	x	x	x
Age		x	x		x		x	x
Sex		x			x		x	x
Race		x	x		x		x	x
Education		x			x		x	
Family income (median)		x	x		x	x	x	x
Occupation		x			x	x	x	x
Place of work		x			x	x	x	x
Rent paid		x	x		x		x	x
Number unemployed		x			x		x	
Means of transportation to work					x	x	x	
Average household size		x	x		x	x	x	x
Type of housing unit		x						
Number of bedrooms per dwelling unit		x						x
Bathroom and kitchen facilities		x						

Table 2 continued

	Division Requiring the Data							
	Capital Improve-ments	Community Analysis & Research	FACE	Graphics	Planning Studies	Trans-portation	Urban Design	Zoning
Data Obtained From Other Information Systems in City Government								
Number receiving public assistance by type			x		x			
Criminal offenses					x			
Juvenile court cases					x			
School data								
a. number of persons in school		x			x		x	
b. school grade		x			x		x	x
c. last address		x						x
d. school dropouts		x			x			
e. race		x						
Public Health data								
a. births		x			x			
b. deaths		x			x			
c. Mortality		x			x			

DATA ITEM DEFINITIONS

1. The lot number is a number assigned each lot in the city by the Assessor's office.
2. The block number is a unique number assigned each block in the city by the Assessor's office. It is used along with the lot number to identify each piece of land. The block numbers are also used to index every block in the city to a basic map.
3. The lot street address forms another index to real property lots. When several addresses pertain to the same lot, they would all be indexed to that lot and block number.
4. A system of grid coordinates would permit the identification of locations apart from topographic or political references. It would allow for the most rapid and efficient grouping of data into geographic aggregates; once the boundary coordinates were specified the computer would be able to select all parcels within those coordinates (unlike a block system which required the manual selection of each block since the numbers do not bear a consistent relationship to each other). Conversely, if data were needed about the area surrounding a particular lot, one would only need to specify the size of the area and the computer could calculate which parcels were included.
5. The lot numbers of adjacent lots are included so as to show how the lot relates to others in the same block.
6. Political and administrative jurisdictions are included in the lot record in order to relate the lot to certain jurisdictions which affect it. These jurisdictions include:

   a. special garment and height limit districts

b. school, police, and fire districts

c. renewal project area

d. FACE area

e. census tract

f. census enumeration district)
) would permit easy comparison with census
g. census block) data

7. Lot position indicates the position of the lot in the block (corner or interior lot). Corner and interior lots differ with respect to the lot coverage and yard requirements specified in the zoning ordinance.

8. Lot size includes the dimension (length and width), area, and frontage of the parcel. Since most city blocks are rectangular, the frontage and the width will usually be the same but should still be recorded separately. These items are used in determining conformity with the zoning ordinance.

9. Topography includes degree of slope, elevation, and presence of fill land (and the year of fill). The slope of the land and the presence of fill affects the use to which the land can be put. The elevation (from sea level to the center of the parcel) of a parcel can indicate a great deal about it since hill land tends to be more valuable and developed differently.

10. The year of lot subdivision indicates the date when the lot was initially created. This is necessary in order to determine if a lot is of legal size (a lot which does not conform to present size standards is considered legal if it conforms to the standards existing when it was created).

11. The year of lot split indicates the date when the original lot was split. It is needed for the same reason as is the year of lot subdivision.

12. The current zoning of the parcel indicates the presently permitted land use. By cross-tabulating this with the actual land use, one can determine the degree to which zones are distinguished from each other. Previous zoning indicates the land use permitted in the past; it is an indicator of legal status since buildings must conform to the zoning which existed at the time they were built. Modifications of the zone should also be indicated were applicable. Modifications would include:

- Rezoning applications (and their dates) -- record of the Commission's decisions regarding rezoning applications.
- Zoning stipulations -- conditions placed on the zoning of the parcel.
- Zone variance -- any modification of the Zoning Ordinance allowed for a particular parcel.
- Automatic conditional use status -- a use established before the present Zoning Ordinance went into effect where this use is presently classified as a conditional use. They are distinguished from other conditional uses in that they do not require Commission action.
- Conditional use applications (and their dates).
- Transitional status -- any lot in a residential district which abuts or faces a commercial or manufacturing district; uses are allowed on these lots which are not normally allowed on residential lots.
- Nonconforming use status (and expiration date) -- a use which does not conform to the Zoning Ordinance but which did conform to the ordinance in existence when the use was established.
- Violations -- illegal uses (current and past).

13. The general land use code indicates the actual use of the lot; a modification of the land use code prepared by the Urban Renewal Administration and the Bureau of Public Roads is suggested. This modification would use the code's basic categories (residential; manufacturing; transportation, communication, and utilities; trade; services; cultural, entertainment, and recreation; resource production and extraction; undeveloped land and water areas) but would break residential uses into categories used in San Francisco. More detailed classification of nonresidential uses would be given in the Standard Industrial Classification code.

    Both past and present land use should be indicated. Past land use can be given only in terms of the classification system used when the data were collected.

14. Off-street parking and loading spaces indicate both the open and enclosed space available for parking and loading. These items are important in transportation studies and in determining conformity with the Zoning Ordinance.

15. The lot and block numbers of other lots comprising a common site shows which lots are related to each other in that they are used by the same company (frequently the land use of a lot takes on a different meaning when it is recognized as being part of a larger site).

16. The assessed value is the current assessed value of the land and the improvements on the land (the total assessed value is the sum of the two). These items can be used to compare property values in different parts of the city and according to different land uses. Taxes are the part of the assessed value paid to the city. Tax exempt status indicates if the land or part of it is not subject to taxation and why (public property or because it belongs to a tax-exempt institution such as a church or a school, etc.).

17. The date of last sale indicates when the lot was last sold. It is important since sale prices change greatly over time.

18. The price of last sale indicates the price actually paid for the lot. It shows the value of the lot at one point in time.

19. The owner's name is required since many notices have to be sent to the owner's of lots near those for which applications have been filed with the Planning Department.

20. The owner's address is also needed for these notices. It can also be used to determine if a building is owner occupied.

21. The number of buildings on the lot is self-explanatory. Building characteristics are given separately for each building.

22. The year in which the structure was built can be used as an indicator of deterioration. It is the year in which the building was certified as ready for occupancy.

23. The type of construction would indicate if the building were reinforced concrete and structural steel, reinforced concrete, masonry, light steel, or wood frame.

24. The cost of construction is included as part of the housing inventory.

25. The area of the first floor indicates the actual size of the floor. It is used to determine lot coverage (a zoning consideration).

26. Gross floor area is the total floor area in the building. It is needed to calculate floor-area ratios.

27. The number of floors is self-explanatory.

28. The height of the building is measured from the center of the front of the building. It is used in zoning and in drawing up view perspectives from different points of the city.

29. The number of dwelling units in each building is an important item in any analysis of the housing stock.

30. The number of bedrooms is also an important item in an analysis of the housing stock.

31. The building condition would be determined in the field by means of a group of observable criteria. The Assessor's office would be the most likely source of this information since they must examine each building.

32. Conversion permits (and date) indicate a change in a residential structure from a single-family unit to several family use.

33. Demolitions (and date) indicate that a building was demolished on the lot.

34. A Public Works condemnation is an order stating that the building is substandard in relation to the city code regulations.

35. A health condemnation is an order issued by the Director of the Department of Public Health closing and establishment or residence because of unsanitary conditions.

36. Police permits are granted to entertainment establishments, second-hand stores, auto wreckers, junk dealers, massage studios, pool and bowling establishments, and night clubs.

37. Health permits are granted to all establishments concerned with food preparation or service.

38. Fire Department permits are granted to automobile service stations, and all establishments dealing with combustibles, and the storage and use of chemicals and flamable products.

39. City Planning permits are granted to quarrying operations, temporary buildings and uses incidental to construction activities, Christmas tree sales, neighborhood exhibitions, and charitable, patriotic, or welfare uses.

40. The establishment name would be recorded for each establishment in a building.

41. The location of the establishment within the building would be given along with the floor space allocated to that establishment.

42. The Standard Industrial Classification code is recommended as the means of identifying the type of business. This classification system covers the entire field of economic activities.

43. The zoning classification where this use first permitted is the most restrictive zoning category in which this use is allowed.

III. An Interdepartmental List of Information Needs and Resources.

Recognizing the need for interdepartmental cooperation and coordination in the establishment of an information system, the project staff undertook a series of informal interviews to determine the information each department might seek from an established system and information it could contribute. The results of the survey are given in the following table.
As in the previous list of items recorded for the Department of City Planning, it must be recognized that not all of the items listed may be desirable or attainable in an operational information system. Further, items not now considered useful in any particular department's operation may become so in the future. However, the list does provide: 1) an indication of informational needs and hence, the scope of the system; 2) sources of information currently available.

The authors of the study have made no attempt to evaluate the stated needs for information. Such an evaluation, necessarily painstaking and complicated, can only be accomplished when detailed design studies of the information system are undertaken. A list of persons who cooperated with the staff in giving their time, advice, and information about their Department's specific needs is attached.

EXPLANATION OF NOTES AND SYMBOLS

s = Source only

su = Source and user

u = User only

u+ = Potential user if item would be available

a = Uses different code,their own

b = For places they inspect

c = For lots in Redevelopment area

d = For the Downtown Zoning Study area

e = In design, potential source

h = For public housing

i = Not kept updated

j = Commercial and industrial areas of police patrol

k = FACE loans

su[1] = Before, during and after Redevelopment

[3] = Need the migration data derived from these items

LIST OF DEPARTMENTS INTERVIEWED FOR DATA BANK STUDY

Department	Respondent
Assessor	Mr. Joseph Tinney Mr. Val King Mr. Al Bacci
Board of Education	Mr. James Porter Mrs. M. Zwillinger Mr. Saul Barnett Dr. Wm. L. Cobb
Board of Permit Appeals	Mr. Phillip Siggins
Disaster Corps	Mr. Shura Fadeff Mr. John Greig
Economic Opportunity Council	Mr. Jeff Palley Mr. Alden Bryant
Finance and Records	Mr. Virgil Elliott
Fire Department	Chief Ken Calden Capt. George Ryst
Public Health	
Environmental	Mr. John Kelterer Mr. Larry Crowley Mr. Bob Bullock
Statistics	Miss Mildred Holota
Community Mental Health Services	Dr. J. M. Stubblebine,MD
Housing Authority	Mr. Gryffyd Partridge*
Human Rights Commission	Miss Edith Witt
Library	Mr. John F. Anderson Mr. Robert Figone
Parking Authority	Mr. Arthur Becker
Police Department	Sergeant Fred Long Mrs. K. Best

(* Resigned)

REAL PROPERTY DATA	Assessor	Bd. of Educ.	Bd. of Permit Appeals	City Planning	Disaster Corps	Econ. Opport. Council	Finance & Records	Fire Department	Health Dept.	Housing Auth.	Human Rights Comm.	Library	Recreation & Park	Parking Auth.	Police	Public Utilities	Water Dept.	Public Works	Real Estate	Redevelopment	Social Services	State Dept. Employment
Locational Items																						
Lot number	su		u	u			u	u		u			u			u	u	u	u	u	u	
Block number	su		u	u			u	u	u	u			u	u		u		u	u	u	u	
Street address	u	u	u	u	u		u	u	u	u				u	u	u	u	u	u	u	u	
Grid coordinates	u+	u+	u+	u+	s+u+	u+		u+	u+	u+	u+	u+	u+	u+	s+u+	u+	u+	u+	u+	u+	u+	
Adjacent lots	su		u	u	u+			u+							u+							
Jurisdiction																						
Garment district	u		u	su				u+	u+						u+			u+	u			
Height "	u		u	su														u	u			
Automotive "	u		u	su				u							u+			u	u			
Fire "			u	u	u			su	u						u+			u	u			
Police "			u	u	u				u						su							
School "		su		u	u+	u+		u+	u			u+	u		u			u	u			
Redevelopment project area	u		u	u						u+								u	u	su		
FACE area	u		u	u						u+								su	u			
Census tract				su		u+			su		u+	u+			su						su	su

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Jurisdiction - continued																						
Census enumeration district				su								u+			u+						u+	
Census block				su								u+			u+						u+	
Corner or interior lot	s		u	u															u			
Sanborn map number			u	su																		
Slide area			u+	u+														su				
fire limits								su										u				
In or abut R/W																						
Highway			u+	u+										u+		u+			u			
BARTD			u+	u+										u+		u+			u			
Date of last sale	su		u+	u+						u+									u			
Price of last sale	su		u+	u+						u+									u			
Owner's name	su		u	u				u+	u+						u			u	u			
Owner's address	su		u	u				u+	u+						u			u	u			
Fires (kinds, dates, losses)			u+	u+	u+			su										u+		u+		
Fire alarm responses (types, dates)					u+			su														
Nearest hydrant distance					u+			u+														

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Nearest alarm box distance					u+			u+														
Lot coverage			u+	u+														u+	u+	s[c]u		
Nearest public transit				u+	u+	u+			u+		u+	u+				u+					u+	
Mixed land use																						
Nearest Public Health facility (type)				u+	u+	u+			su+		u+				u+						u+	
Public housing			u	u				u+		su					u+				u+			
Land characteristics																						
Lot size:																						
depth	su		u	u						u+						u+		u	u	u		
width	su		u	u						u+						u+		u	u	u		
area	su		u	u						u+			u+			u+		u	u	u		
frontage	su		u	u				u							u	u+		u	u	u		
Topography:																						
degree of slope			u+	u+	u+			u+		u+					u+	u+		u+				
direction of slope			u+	u+	u+			u+		u+					u+	u+		u+				
percent of slope			u+	u+	u+			u+		u+					u+	u+		u+				
elevation			u+	u+	u+			u+		u+			u+		u+	u+		u+	u+			

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Topography - continued																						
Presence of fill land and year of fill			u+	u+	u+					u+			u+			u+		su	u+			
Year of subdivision	su		u	u														u	u			
Year of lot split	su		u	u													u	u	u			
Lot legality			u	u														u+	u+			
Zoning:																						
Current zoning	u		u	su	u+			u		u		u+	u+		u	u+		u	u	u		
Maximum number of dwelling units allowed	u+		u	u				u+	u+							u+		u+	u+			
Rezoning applications			u	su														u				
Previous zoning	u		u	su											u			u	u			
Zoning stipulations			u	su														u+	u+			
Zone variance			u	su															u+			
Automatic conditional use status			u+	su														u+				
Conditional use applications			u	su														u+	u+			
Transitional status			u	su														u+	u+			
Nonconforming use & expiration date			u	su														u+	u+			
Violations			u	su															u+			

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General land use code	s[a]u		u	s[d]u	s[e]u	u+	s[a]u	u+	s[b]u	u+	u+	u+		u+	s[a]u	u+		u+	u+	s[c]u		su
On-street parking spaces			u+	u+	u+									u+	u+	u+		u+				
Off-street parking spaces			u+	(s[d]u+)u+										u+		u+		u+	u+			
Lot & block nos. of other lots comprising/common site	su		u+	u+	u+		u+	u+							u+				u+			
Assessed value:																						
Land, year assessed	su		u	u						u			u	u		u			u	su[1]		
Improvements, year assessed	su		u	u						u			u	u		u			u	su[1]		
Total assessed value	su		u	u						u			u	u		u			u	su[1]		
Taxes	u		u	u			su												u	su[1]		
Tax exempt status	u		u	u			su									u			u	u		
Year first assessed	u		u	u			su												u			
Personal property exemption	u		u	u			su												u			
Building Characteristics:																						
No. buildings on lot	s[i]u		u+	u+	u+			u+							s[j]u+	u+		u+	u+	u+		
Setbacks			u	su														u				
Year built	u		u	u		u+		u		u+						u+		su	u	u		

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Building Characteristics - continued																						
Type of construction			u	u	u+	u+		u		u+					u+	u+		su	u	$s^c u$		
Cost of construction	u		u	u						u+						u+		su	u	$s^c u$		
Floor area ratio			u+	(s^du+)														u+		$s^c u$		
Area of first floor	$s^i u$		u+	u+																		
Gross floor area	$s^i u$		u+	$s^d u$		u+	u+							u+		u+		su				
Number of floors			u+	u+	u+		u+												u+			
Height of building			u+	u+	u+			u+							u+	u+			u+			
Number of dwelling units	$s^i u$		u+	u+	u+	u+	u+	u+		$s^h u$	u+					u+		su+	u+	$s^c u$		
No. of bedrooms per structure						u+	u+			$s^h u$									u+	$s^c u$		
Condition of building	$s^i u$		u+	u+	u+	u+		u+	u+	u+					u+				u+	u+	u+	
Conversion permits and date(DPW appl.# & type wk done)	u		u+	u														su	u+			
Demolitions, and date	u			u	u+												u+	su	u+			
Location of utility control panels & shutoffs					u+			su							u+							
Location of combustible materials					u+			su							u+							

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Building Characteristics - continued																						
Fire prevention inspections :					u+			su														
Date of last inspection					u+			su														
Violations			u+		u+			su							u+							
Specific hazards					u+			su							u+							
Presence of automatic fire sprinklers					u+			su										su				
Presence of fire wall					u+			su														
Special permits:																						
Police			u+	u+											su							
Health			u+	u+					su						u+							
Fire			u+	u+				su							u+							
Public Works condemnations			u+															su	u+	u+		
Public Works abatement			u+															su				
Health Department condemnations			u+						su						u+				u+	u+		
Number of bathrooms	$s^{i}u$																					
Number of rooms per structure	su		u+	u+		u+											u+		$s^{c}u$			

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Building Characteristics - continued																						
Dollar amount of improvements made during redevelopment project	u+			u+													u+			$^{s}c_{u}$		
Tax delinquent							su			u+			u+						u+	u+		
Alteration permits (& date, DPW appl.# & work done)			u+	u+													su		u+	u+		
Building permits (& date, DPW appl.#, work done)			u+	u+													su		u+			
Dollar amount of improvements since construction	su		u+	u+													u+		u+			
Method of financing				u+		u+					u+								$^{s}k_{u}$	$^{s}c_{u}$	u+	
Size of bedrooms											u+									$^{s}c_{u}$		
Location of each unit in bldg. (by characteristics)				u+					u+											$^{s}c_{u}$		
Dollar amount of improvements needed				u+					u+											$^{s}c_{u}$		
Dwelling units on ground floor				u+																	u+	
Dwelling units not on ground floor																					u+	
Number of steps to dwelling unit																					u+	
Presence of elevators				$^{s}d_{u}$																	u+	
Occupancy classification																	su					
Certificate of occupancy and date			u+	u+													su	u+				

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Building Characteristics - continued																						
Original occupancy or use			u+	u+														su	u+			
Frontage of building			u+	u+														su	u+			
Depth of building			u+	u+														su	u+			
Exterior wall material			u+	u+	u+			u+										su				
Full or partial basement																		su				
Boiler data								u+										su				
Air tank data								u+										su				
Value of permit																		su				
No. of inspections per permit																		su				
Certificate of final completion			u+	u+														su				
Warning of DPW violation			u+															su				
Illegal units dismantled			u+	u+						u+								su				
Number of registered motor vehicles				u+	u+	u+			u+				u+	u+	su	u+		u+				
Number of licensed drivers		u+		u+	u+	u+			u+			u+	u+	u+	su	u+		u+				

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Number of persons	u+			u+	u+	u+		u+	u+		u+	u+	u+	u+	u+	u+		u+		u+	u+	
Age	u+			u+	u+	u+		u+	u+		u+	u+	u+	u+	u+	u+		u+		u+	u+	
Sex	u+			u+	u+	u+			u+		u+	u+	u+	u+	u+	u+				u+	u+	
Race	u+			u+		u+			u+		u+	u+	u+	u+	u+	u+				u+	u+	
Education	u+			u+		u+			u+		u+	u+	u+	u+	u+	u+					u+	
Median family income	u+			u+		u+			u+		u+	u+	u+	u+	u+	u+				u+	u+	
Occupation	u+			u+	u+	u+			u+		u+	u+	u+		u+	u+					u+	
Place of work				u+	u+	u+			u+				u+	u+		u+		u+			u+	
Rent paid				u+		u+			u+		u+	u+	u+			u+			u+	u+	u+	
Number unemployed	u+			u+	u+	u+			u+		u+		u+	u+	u+						u+	
Means of transportation to work				u+	u+	u+			u+		u+	u+	u+	u+	u+	u+		u+			u+	
Average household size	u+			u+	u+	u+			u+		u+	u+	u+	u+	u+	u+				u+	u+	
Type of housing unit	u+			u+	u+	u+			u+		u+	u+	u+		u+	u+		u+			u+	
# bedrooms per dwelling unit	u+			u+		u+			u+		u+								u+		u+	
bathroom & kitchen facilities	u+			u+		u+			u+						u+				u+		u+	
Nationality	u+			u+		u+			u+		u+	u+	u+		u+	u+					u+	

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Data Obtained from Other City Department Information Systems (by census tract)																						
School Data																						
Number of students		su		u+	u+	u+		u+	u[3]		u[3]	u+	u+		u+	u+		u+			u+	
by age		su		u+	u+	u+			u[3]		u[3]	u+	u+		u+	u+		u+			u+	
by race		su		u+		u+			u[3]		u[3]	u+			u+						u+	
by grade		su		u+	u+	u+			u[3]		u[3]	u+	u+		u+	u+					u+	
by previous residence		su		u+		u+			u[3]		u[3]	u+			u+							
Number of high school dropouts		su		u+		u+			u+		u+	u+			u+						u+	
Public Housing Residents																						
Number of persons				u+	u+	u+		u+	u+	su	u+	u+	u+		u+			u+			u+	
by population per household				u+	u+	u+		u+	u+	su	u+	u+	u+		u+			u+			u+	
by age				u+	u+	u+			u+	su	u+	u+	u+		u+						u+	
by sex				u+	u+	u+			u+	su	u+	u+			u+						u+	
by race				u+	u+	u+			u+	su	u+	u+			u+						u+	
by income				u+		u+			u+	su	u+	u+			u+						u+	
by rent				u+		u+			u+	su	u+	u+									u+	

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Welfare Data																						
People receiving public assistance by type				u+		u+			u+		u+	u+			u+						su	
by age, race, sec, education, income				u+		u+			u+		u+	u+			u+							
Yearly survey of ADC families						u+			u+		u+										su	
amount of rent paid				u+		u+			u+		u+										su	
type of housing				u+		u+			u+		u+										su	
condition of housing				u+		u+			u+		u+										su	
income				u+		u+			u+		u+										su	
Public Health Data																						
Births				u+	u+	u+			su		u+				u+	u+		u+				
Deaths				u+	u+	u+			su		u+				u+	u+		u+				
Morbidity				u+	u+	u+			su		u+				u+	u+		u+				
Criminal Offenses				u+		u+					u+				su							
Juvenile Court Cases				u+		u+					u+				su							

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Non-residential Space Use																						
Establishment name	su			u+	u+	u+	su	u+	u+				u+		$s^{j}u$	u+	su	u+				su
Establishment location	su			u+	u+	u+	su	u+	u+				u+		$s^{j}u$	u+	su	u+				su
SIC land use classification				u+	u+	u+		u+	u+		u+		u+		u+	u+				$s^{c}u$		su
Zoning classification where this use 1st permitted			u+	su				u+	u+						u+			u+	u+		u+	
Establishment owner's name			u+	u+	u+	u+	su	u+	u+		u+				$s^{j}u$		su	u+				
Establishment owner's address			u+	u+	u+	u+	su	u+	u+		u+				$s^{j}u$		su	u+				
Number of employees			u+	u+	u+	u+	u+	u+	u+		u+		u+		u+	u+		u+		u+		su

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(Departments Interviewed for Data Bank Study - continued)

Department		Respondent
Public Utilities Commission		Mr. James Finn
	Municipal Railway	Mr. Vern Anderson
		Mr. M. F. Illig
	Water Department	Mr. Harold Grant
		Mr. Eugene Hannon
		Mr. Raul Bell
Public Works		
	Traffic Engineering Bureau	Mr. Norman Bray
	Central Permit Bureau	Mr. Al Goldberg
	Property Conservation Div.	Mr. Bernard Cummings
Recreation and Park Department		Mr. Joe Misuraca
		Mr. Leonard Fitzpatrick
Real Estate		Mr. Max J. Babin
		Mr. Henry Flynn
		Mr. John Donovan
Redevelopment Agency		Mr. Walter Gaby
		Miss Laura Denny
Retirement Board		Mr. Philip Kearney
S. F. Chamber of Commerce		Mr. Fred Martin
		Mr. Dave Marcelle
State Department of Employment		Mr. James Neto
Social Services		Mr. Allan Willard*
		Mrs. Elsa Reisner

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